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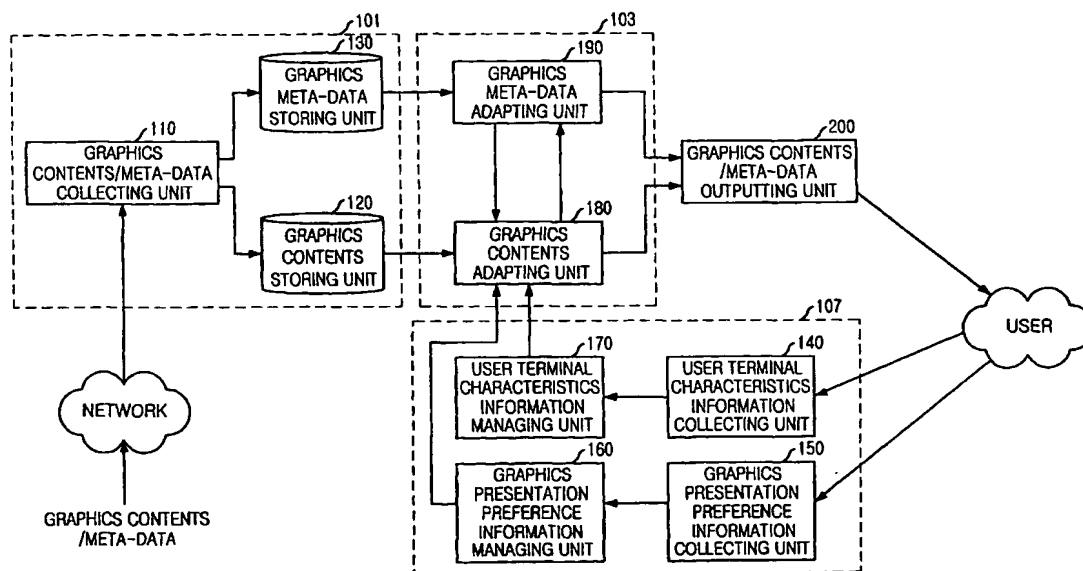
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(54) Title: APPARATUS AND METHOD FOR ADAPTING GRAPHICS CONTENTS AND SYSTEM THEREFOR



(57) Abstract: Apparatus and method for adapting graphics contents and system therefore is provided. The apparatus and method provide the best experience of digital contents a user by adapting the digital contents to the user's graphics presentation preference. The apparatus for adapting graphics contents includes a graphics usage environment management unit and a graphics adaptation unit.



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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) USPAT, FPD(US), PAJ, FPD(EP)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Distributed Computing Systems, 2002. Proceedings. 22nd International Conference on , 2-5 July 2002, Pages:507 - 516, Phan, T.; Zorpas, G.; Bagrodia, R.: "An extensible and scalable Content Adaptation Pipeline architecture to support heterogeneous clients"	1 - 16
Y	Information Technology: Coding and Computing, 2001. Proceedings. International Conference on , 2-4 April 2001, Pages:405 - 410, Kaplan, A.; Lunn, J.: "FlexXML: engineering a more flexible and adaptable web"	1 - 16
A	Distributed Computing Systems Workshops, 2002. Proceedings. 22nd International Conference on , 2-5 July 2002, Pages:401 - 407, Krebs, A.M.; Marsic, I.; Dorohonceanu, B. : "Mobile adaptive applications for ubiquitous collaboration in heterogeneous environments"	1 - 16
A	Multimedia Computing and Systems, 1999. IEEE International Conference on , Volume: 2 , 7-11 June 1999, Pages:302 - 306 vol.2, Curtis, K.; Draper, O.: "Multimedia content management-provision of validation and personalisation services"	1 - 16
A	US 2002/0066073 A1 (Lienhard, H. et al.) 30 May 2002	1 - 16
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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002/0066073 A1	30.05.2002	NONE	